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1/42

SEQUENCE LISTING

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<120> Methods for Distinguishing Rice Varieties

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<160> 114

<170> PatentIn Ver. 2.1

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<212> DNA
<213> Oryza sativa

<220>
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hit, mmm, fom, don, or ssk"
/note=" "c" replaced with "t" "

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hit, mmm, fom, don, or ssk"
/note=" "a" replaced with "g" "

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<222> (593)
<223> /cultivar="ksh, krr, tgr, mnk, yma, tkh, akk, mtb,
hit, mmm, fom, don, or ssk"
/note=" "c" replaced with "t" "

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ttcgtttcaa caaacaagat ataaagttca accagatttt acatttttga aaacctttta 180
tctttacata tatcagtggg ggagttgaaa tgggagatac atcaactcta aattagagaa 240
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ttcagtgaca cattgggttg atttagcgac ttcaaacctt ttgtcttctt ttccattttt 360
caaatttcta gctctacaac taattcaatg actactcagt ttaaaacaaa acaaatggaa 420
gattggttgg gagattttaag aagaaacttg ccaggtggtg gcttggtccg tggagggaaag 480

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agggctcagg ggctaaccac ctcgcaactt agggctcttg cctccgtctc ccgccttttc 540
gccgagagcc cgcaaggtga cagagtgcgg cgaggtcgac acttcggccg ttcgggggtcg 600
ccgcgtcggg cgtccggggc gcgtcgtggg tcggggggact gagggcagct actcagctag 660
accgctggag cccaaaggaa tctaaggtta catgctgtct tgttgagcct attttatggg 720
cctgcgactt tgcagtttag cgaggcatat tgggaataaat ttaatttagg tctctcaatt 780
tgtcgtcgag cctgaaattc atcactggac cgcaaaacta gatacatcgc attccccaac 840
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<210> 2
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<220>
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<222> (304)
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      akk, hnh, hit, mmm, fom, or ssk"
      /note=" "a" replaced with "t" "

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gggccctact ctctttgggc cagcatgtca gtgtcagcag aggatctcat tcctacagtc 180
aatccatgtg tgctactccg ttaaaaaaac gaattccaag ctacaaacct aaacacgttt 240
ttttggacgg aggggtatat ataaacaaag aaaaagcact gtaggtacat aatatagtac 300
tagatcagtc ttattacagc tgttcaaaaa cagttcagta tatagtgaat ctagttggtc 360
tgttgctact gcagttaatt ggctctgggt gcttttggtg atctgttgct actgcagtta 420
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agttcaaggc agccacaacc acatacaggc gatccatata ttgatttata tatctgatcc 720
gtttgttgag gttgggtgcat caatccccc tgaagcagct atgtcgagcc taattgcgat 780
ttgattaatc aatttttctc atccaacgat ttaattatgc gtgattttaa tgattcgatc 840
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<213> Oryza sativa

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      fom, don, knh, or ssk"
      /note=" "a" replaced with "t" "

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<220>
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<222> (356)
<223> /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
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fom, don, knh, or ssk"
/note=" "a" replaced with "g" "

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fom, don, knh, or ssk"
/note=" "g" replaced with "a" "

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<222> (514)
<223> /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
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fom, don, knh, or ssk"
/note=" "c" replaced with "t" "

<220>
<221> variation
<222> (515)
<223> /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
yma, hez, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
fom, don, knh, or ssk"
/note=" "a" replaced with "g" "

<220>
<221> variation
<222> (552)
<223> /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
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fom, don, knh, or ssk"
/note=" "c" replaced with "t" "

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<221> variation
<222> (695)
<223> /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
yma, hez, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
fom, don, knh, or ssk"
/note=" "a" replaced with "g" "

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acttcttatt tctagctgac ataatgagga ttgaggaaat aagtgtcttc ctatttcata 180
aacaaaagaa aagtaatttg agtcaaacag tcacatcact atttaagttt tgattcaatc 240
gatagtttga ttcatattac atctactatt tgatacgaga ctcaatgtct caactcttaa 300
gtctaaaagt aacttttccaa tgctgcacaa aggtagtagt cagggacacg aagataagtg 360
gatgagaggg actgacaaaag gtagccggcc aaccgcttgg cattgatggc gcttgcccgt 420
tggtcgctcg ctgcctcgtg ttgggctggg gtcgggactt tgcaggcatc gtcatttcac 480
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ttgatctcgt tcgcctctca gcctccaatg ccactgatgg cagatgggccc tctctaatacg 600
attcacaggt agaagcagga ttgtggctcg gctatgcatt aatgtgcgcc tctccgatta 660
acttgggtgc cccaaaaaaa ttggggggaca ctctatcatc gccaatgtcg cacacaacct 720

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tcgacaggct tgcccattag tgtgacactc ctgcccacat cactgctcca ttgtcatcca 780
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<210> 4
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<213> Oryza sativa
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<223> /cultivar="ksh, ymt, don, or knh"
      /note=" "t" replaced with "c" "
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tcctatataa atcctttgat tcaaagggcc ctaagtttcg tacgtgtgca actgtgcatc 180
cagcacgtac tactacgtac tcctatgtac ttgtagtggg tagcctata catatgcatg 240
aagcgttcca ggaaaaatag gagtctcagt aattttgtgca ggcattgcggc ccatggagta 300
atagaccatg ctgaataatt tcagttcaaa tttcatactc caactgtaat accatacgca 360
aaccatcaac ttacaatact gatatacttg acatttcaaa ataacatagc ctttggtttt 420
agctgacgta gcgactgagt aagctagcac gaggctcata tgggtccac atgtcagcgg 480
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gaggactgca agacgacttt cttttcgctt accactggaa ggcaacacct tgtttccctg 660
ccttctagtt gagcgaggac actgaatgca tggagggtgt gtgacccaaa tctacggcag 720
aatccctcgc cggaagttcg ccggagatct agcagagaag aggcgagaag aacagggtag 780
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gttttctcaa tacagctgga gtatatatac tcacgcactc caccctctct gcccttaggg 900
cccaccttgt catagacact tctatctata aagagtagaa gatgtattca cttctgaaaa 960
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<210> 5
<211> 840
<212> DNA
<213> Oryza sativa
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      fom, or don"
      /note=" "t" replaced with "c" "
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cgtacaactc acgtctgacc agcacttagc tgctaattgc cctagccaca tggagagaag 120
ttggtctgcg tgaagcgtaa cgattggcag ataaagtgtg attggatggg aatcggacga 180
gggagtcgaa cgtatagcaa cactccagaa gtaaagcagt aaaccgaaaa agttttgcta 240
tcacttgatg gaccgtctcc acaagtggcg actggcacga catggccact cgacagaacc 300
gcacaacaaa tgctgatcct ttgcccctat tccatgcgaa gttgcgactt gcgagtcttt 360
gggcagggca tgcactactg acaagatgaa agaagaaaat caaccgtaat tcgggcgtgc 420
actgctgcag aatagtcctt gtgatcatgt ccatgtgacc atgttcgtta cgttctgagg 480
cgtcgatagc gagcgatgct ggtaatcgtg accaatctcg ttcacgtcca ccttggtgac 540
gcgcacgtac gtcgctatat atgacaacgt cctgctacat atagccttgc tcactttcgg 600
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actttgacgt atgtgaagag agcaagacta ggagccacta atcatatggt ttggtacatg 660
agaggatatg catgtttcac tttgcaccca acatgtactg tactcatcta gtcacccctac 720
tagtattttc catcggtgtc cctttctcct gtgatctctc gctttgcaca caaacctcgc 780
aacaaaacgg tctcgctgtc gcctttcagc gcttcggcaa aggattggtc ggttcatgag 840

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<210> 6
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<212> DNA
<213> Oryza sativa

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ank, hnh, ymt, hit, mmm, fom, don, or knh"
/note=" "a" replaced with "g" "

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<220>
<221> variation
<222> (624)..(626)
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ank, hnh, ymt, hit, mmm, fom, don, or knh"
/note=" "tgc" deleted"

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agaaggtgca gttgttcaact tgttcctggc atcaacgtgt acggttgaac aaatcggtgg 180
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gaaccgagat cttcttggcg ctgtcagcct gtcacaaaact cgcaatccaa ttgcaacttcc 420
agcggttgag caggttcaat tcaacatgac tttcatcagg agatggtaag ttaggaacag 480
attactgtca caactcaca cagttattac tactatcgca acaaatgcta gctgtcctta 540
tcctcatcga ctggatactt cagaaacaag cataacagta gcattggagc aaaggacaca 600
gcattggctag aagtagatgc tgctgcctag agatatcatc tcgaattcat ggcatgaaca 660
aacgtcggtt atgcagccat gcaggaataa taagctcaga acaggattca ggacaaattc 720
aagctatcta caagcttgcc agcatcatca tattataata attgctttaa tagtcagcaa 780
actcgtacag aatagccaga tccaaatttc cacaaactat atatcatcat caggaatttt 840
aaaaagagaa ctcggaatcg atttcgcatg atattcgagg acaccaagc caaactgacg 900

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<210> 7
<211> 900
<212> DNA
<213> Oryza sativa

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ank, hnh, ymt, hit, mmm, fom, or knh"
/note=" "a" replaced with "c" "

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<220>
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<222> (341)..(342)

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<223> /cultivar="hts, mth, yki, krr, mnk, hez, ksh, akk,
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/note=" "tg" replaced with "tgtg" "

<220>

<221> variation

<222> (534)

<223> /cultivar="hts, mth, yki, krr, mnk, hez, ksh, akk,
ank, hnh, ymt, hit, mmm, fom, or knh"
/note=" "a" replaced with "c" "

<400> 7

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agaaccagta cattatctct atctgtgaca gagaacacaa gaatgcaa at gctgataaag 180
aatcaagaaa gcattgtgca agcagcaagg tgagtagaga gtgatggaag cagagagaag 240
ctgcagacta gtgatgaaaa tgattggtga gtacagtgtg acaactaaca acaagtctct 300
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gcttctgggg ttgttctact gtccaccaga gcaaccagga caagtcttct cactctacca 420
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aactagatta tgttttcttt cctcaataaa gattaatagt attgttaatc atgacatctt 540
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caaacattgt gttgttcatg tctctttctt gcctaccttt gttgaactgg tttgccttgg 660
gagacacaca ggacactcga ggctgccttg ctggcctctt tgtcaggag aaacctgcta 720
atctgctata atagtgttgc ttataattct atgattctat ccatacaaaa ggacacagta 780
tagctgcac ctttaactgc agcttgcagg ctttttctat cgtttacttg ttagcttata 840
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<211> 900

<212> DNA

<213> Oryza sativa

<220>

<221> variation

<222> (247)

<223> /cultivar="mth, yki, krr, tgr, ghm, mnk, yma, hez,
ksh, tkh, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
fom, don, knh, or ssk"
/note=" "a" replaced with "t" "

<220>

<221> variation

<222> (259)

<223> /cultivar="mth, yki, krr, tgr, ghm, mnk, yma, hez,
ksh, tkh, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
fom, don, knh, or ssk"
/note=" "t" replaced with "c" "

<220>

<221> variation

<222> (307)

<223> /cultivar="mth, yki, krr, tgr, ghm, mnk, yma, hez,
ksh, tkh, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
fom, don, knh, or ssk"
/note=" "g" replaced with "a" "

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<220>
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<222> (358)..(359)
<223> /cultivar="mth, yki, krr, tgr, ghm, mnk, yma, hez,
ksh, tkh, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
fom, don, knh, or ssk"
/note=" "ta" replaced with "tgta" "

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<220>
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<222> (396)
<223> /cultivar="mth, yki, krr, tgr, ghm, mnk, yma, hez,
ksh, tkh, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
fom, don, knh, or ssk"
/note=" "a" replaced with "g" "

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<220>
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<222> (444)
<223> /cultivar="mth, yki, krr, tgr, ghm, mnk, yma, hez,
ksh, tkh, akk, ash, ank, mtb, hnh, ymt, hit, mmm,
fom, don, knh, or ssk"
/note=" "t" replaced with "c" "

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aaaagaacaa gacgaaacat aggtaggatt gcaggatgct caagtggaga cttgtagtgt 180
tagatgaagt gaagtggaaa gccgaagtcg cgtgaacgaa gcaacaaaaa attgtgggag 240
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gccccaatgt ttaaagagaa ctttaacgat taaatttggc cacgaccggg aagccgataa 480
acaaaagatg agaataaagt actgtatata caacttccag cctcatcttt tcaattatgc 540
ttatgtttat caactaaaat ttaaattttc aaccttaaag ttagagttga ttttaggggt 600
ttttttatcg aagtttattt tttagccttt acttttagat cgtaggaaca cgtatatgaa 660
aaaattattt ttcatttgca attataccgt ttgtcttatt ccctatataa gcgaaacgag 720
ggaccttccc tgccttgctt gtgatcatca gtcactctat ctatccgctg gatgtgaagt 780
tacgacagaa atgatccatc gttcaacttg aattacactt gtactactag cgggtgtacg 840
tcgcatgtca gcgtaacgaa acgatgacat cgccatcaca gtaggagtat tgggtactaa 900

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<210> 9
<211> 900
<212> DNA
<213> Oryza sativa

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<220>
<221> variation
<222> (475)
<223> /cultivar="yki, yma, or ssk"
/note=" "t" replaced with "g" "

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<400> 9
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tgaggcacgt caaatgtttt cataaagtggt gaagtggatg taactcaact gggtatgttt 120
ttttatggaa tcagtctacc taagttgaag tcctagactt acgccgatgc ttgtatttat 180
tgtaattttt tttttcgtgc tagacgccta tcatgacttc gttaatctca agatatgctc 240

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gcacagtctt tcggaggtgc tcatatgagt aagatgtgcg tgtgtacgtt catatgagtg 300
agtatacgtg tgctacgaga gtctgcgtat acagtgtgct tctacaaaaa aatgtttcag 360
agtaaatctc acaaaaactgc aggtactttg atcaaattat tataaaacta cagatttaaat 420
gtgatgtatt acaaaaactac atattttaacc atgaaattat tacagaacta cagatttaag 480
attaagtatc acaaaaactac aaattttaata ataaaattat cacaaagata taggttttg 540
ggttttaaatt cttagcacta atatgttatg attgagttat aaatatctaa gttttgtaat 600
taaattgatg ctaaaccatat agttccacga taattttgtt actaaatctg tagttttata 660
atattctacc ttaaattctat aatttttatga gaaattcagt gttaaattctg tagttttgta 720
atatattatc ttaaattatat agttttgtga aattttaatca atgtttcaca ggagacgtgg 780
catatatgta tactccacag agcgtgtaat taaacgtaat taaaatatga ccaacatgaa 840
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<210> 10
<211> 1020
<212> DNA
<213> Oryza sativa

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<220>
<221> variation
<222> (209)
<223> /cultivar="krr"
      /note=" "g" replaced with "t" "

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<220>
<221> variation
<222> (323)
<223> /cultivar="krr"
      /note=" "g" replaced with "a" "

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<220>
<221> variation
<222> (758)
<223> /cultivar="krr"
      /note=" "c" replaced with "t" "

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<400> 10
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aacacggtgc actcttggtt cccttcaaag tttgctcata gcaacctttc aaatgctatt 180
ttttacagtt tagttacagt aatgctaagt actcccccca ttccaaaata tagggcacia 240
cgattttttc ccctaattgtt gcataatacg aggttcgcat gcatgcgtgc atgctattga 300
ctagcacctc cccctcctct aagttctatt tttaaagcct ctacctcaa gatctctgat 360
ctctaattcc attgggtgca tgcattttat ttattgggat gatccaaatt agaaggtgat 420
aataattttt tcttggtttt tgcgtaagag atagttgctc attatatattt ggaatgtagg 480
ggagtactca tttattctag cacaccaatc tcctgtgcac caaaagtgat tctgcacata 540
gattgagaat gcaaggtagt actaacttgc aattaagtga gtgcattaat tgctgaatat 600
gcataaatta agaacttaag atgcatgcaa agaataattgc tcccagtttc tccactttct 660
gatgtgaact tcccttatct agatcctaca gtgggaactt ttttctgttc atcttgaagt 720
atcttttggt agctgctcat caaaataatt tatattgcct ataacataac ttataccatt 780
ttgtcgaatg ttatttatct aacttcagtg acacctatta tcttttggtg gggaagttca 840
cacttgtaaa atcccattgt cttttgcaga taacagccct gtgggattat ttttgctttc 900
acatcaatgg tgtgaaacca gtgcaaagcc gtggagcttt atcgattctt tgcattggcg 960
caaagtcatc tccagcattt ttgggtactc atttgcaaga tattattgat attggggttg 1020

```

```

<210> 11
<211> 900

```


<212> DNA
 <213> Oryza sativa

<220>
 <221> variation
 <222> (612)..(613)
 <223> /cultivar="krr, tgr, yma, ksh, tkh, akk, ash, mtb,
 ymt, don, or knh"
 /note=" "ca" replaced with "ag" "

<400> 11
 cttaatccct taatcttcat gtttagaaga ttcgaacggg ggatccagtc ttcaacttgg 60
 cacgcacacg tctcaatctg cctctccatt aatagccaaa caagctgtgt ggcttttctc 120
 ttgcaacttg cagctgtgct gatgttgctg cattctgggtg aactaggcta aaaggcattt 180
 tgtggctcagg ccctgttttag ttttacgggtg aaaagttttg gcgtgtcaca tcggatatac 240
 ggacacacat ttaaataatta aatatagtct aataacaaaa taaattacat attccgtctg 300
 taaattgcfga gacgaattta ttaagcctaa ttaatacttt tatcaaatca tggcgcaatt 360
 aggcctaaaaa gattcgtctt acaattttaca cgcaatctgt gtaattagtt tttttattta 420
 tatttaatac taaatacatg tgtccaaata ttcgatgtga catgatgaaa agtttttgcg 480
 tgaaaactaa acaggacctc atccacattg ccatggatac atatcattca tgccatggct 540
 agctacctct tgataatagt agaattgtca cgccccgaac tagtcccagc cggaactagc 600
 ccgtgacgct ccaattttaac ctgttaatcg ataccagtc caggaaatag tgctggtagt 660
 acagggagac agaatatcac agcaacagag gtctctttat tatagagtag aggtacagtc 720
 atgttgggct gcggacagat cccgagctca caactgcatt acagaaggga aacggaagcc 780
 aggacttggg ccaaacaaca caggcgcgac ttgggaacta ggccgaaacc ctaaaactca 840
 tcatagccgg cttgctcctg gaagaactcc tcatcagcag gatccgcttc atcttcttca 900

<210> 12
 <211> 960
 <212> DNA
 <213> Oryza sativa

<220>
 <221> variation
 <222> (765)
 <223> /cultivar="ghm, ksh, ymt, hit, mmm, fom, don, or
 knh"
 /note=" "g" replaced with "t" "

<400> 12
 acggaaaatg atgtaatctt ggaccactct ctgtgacctg tgttatgact tatgactgtg 60
 ctgcaaaggg gagtatgaat tattgttctc aaaactagag atcactcatg ctccaggaag 120
 ccttgaattt gtcttgattt atactgaaag taacctggat tcataaaatt cttgtgttcg 180
 aagcgaatgg ttgaggaata ttatcgtttc attgagagag agatttcac tcagctagaa 240
 aagttaatac ataaaaaaat gttgctagat acctcattga agacagttta acaccaatgg 300
 aaaaaaaatg ttgcaacata tacctcattt tatttcaaca ttgcagtatt aaaagaaatc 360
 ttttatatat gtccttttta aaaaagcatc aagatgtaca agtttttagg ggtttaactt 420
 ggtcaggaag aggatgtgca tcattgtcag gaagacaacg gtgtgaaacc tgtcatgaat 480
 ggtagcctcc cgagacttga gctagaggac ctagtaacac cgaggcatca actagccagg 540
 gatgcaagta ggcaatcaat cgaccatctc tatgagagca cgcgtgctaa tttagtttaa 600
 cgagtttcag atactaccta tgtcctaaaa taagttaatt tttcatccat cacacatata 660
 ccaatacaaaa catcaaaaga ttagaataacc agtcactaga tgaatagaag tcgggggtact 720
 caaaatcggt catatgcttg acaagagagt cgagatgatc caaagtaaaa caaatacaag 780
 attattcgat tcagattgaa aacattgggtt aaaagatagt tcaaagcaaa acatcggttaa 840
 taaaagatga tttaaagtga aatttgctca ttattatgat aatagctcgt ttgattttacg 900
 aggttggcga ctaattaagg cttatttagt tcccaaaata aaaaatttca cgcagtcata 960

<210> 13
 <211> 668
 <212> DNA
 <213> Oryza sativa

<220>
 <221> variation
 <222> (571)
 <223> /cultivar="mth, krr, tgr, ghm, mnk, yma, tkh, akk,
 mth, hnh, or don"
 /note=" "g" replaced with "t" "

```
<400> 13
gaagcatctt aattccagac aagtcaaatt tcatagcaag ggacgatgtt atgattattt 60
attgaattgt acagtactat tcaacctgac aaacattgtg caatcacatg gaaatggagc 120
gttcattttat caaatttgca cgaattcggc gatctcaacc tcaagaggag caactaccgt 180
attcatcctc aatgttaatt tctccccgaa catattatcc tactaccgta ttcacctca 240
atgttaattt ctccccgaac atattatcct ttcgtgcttg atctaatttt aggcatagct 300
caaaattagt gcaactaatc taaaaactgt gaatggacaa aaatatacag cttcagcttc 360
tcaaaaccac ttcccccat cgaacctgaa caaaacccaa ctctgatggc acagtaaata 420
actaaactagg gcaagaacca tcgcgcgaca cgggcgcggg ctagatcgat cgatcggtcg 480
atcaagcccc tcccccaaga gggaaacacg accagcgaca gcgatccatc caacgccgtc 540
gcatcattca cagctatagc ctagcttgga ggaatcaaac catggatttt ggccttgacg 600
ttgtcgatgt gtcgctgctc tccacctcga gaaacntggc cccgtcaggt cttaaatac 660
ggtgtctt 668
```

<210> 14
 <211> 900
 <212> DNA
 <213> Oryza sativa

<220>
 <221> variation
 <222> (660)
 <223> /cultivar="hts, mth, tgr, yma, akk, or ank"
 /note=" "a" replaced with "g" "

```
<400> 14
ttataccaca ggtgctgaca ttaatatgct tttacttcag tttgtgtttt gttctctgtt 60
taatcctgca tatgcctgtt aaatttatta caaagactat attaaactag ttttacctgg 120
cgaaaatatt aaactagctt tgatagttct tgttgcaaca acagaaccgt atttgtttta 180
tttcaaatat tatgttccat tagcggaaag agcttggttg ttttgttacc tctttttttt 240
ggcaaataaa gaatgctata tacaagctag attgcaatcg tatatcagga aattgactga 300
tcatgtatgt cgacatgtcg tcttttatgg gagatgaagt tttaacttcc cccataactc 360
tgtttaggct aaatgtagtt ttgcagaaat tttctgccta aatctatttt gtactttgtt 420
gatctaacat tccttacact tagtttctcc atttattgat tgattatttt tctctgtttg 480
ttgaggcctt agcatgtttt gcttctctct tttgctggca ggtgctgcgt gaggttacca 540
gtgatactat tggagcttgt atatgatgtg tcctttggga ccattcttct gcatagctgt 600
gcagaagctg ctactagttt gttggagaac ctggtggaag acagcttctg cttgtttgta 660
taataagatc agcttctagt tagtattact tataagttgc tgcagaattt tgtcgtttgg 720
cagcaccgca gaatttttta ctgtgtagaa gctgtagaac atctatatat cacttttcaa 780
tttgaagaat tgtaagaga ggcaatggcc gcattctaag caggtgctct atggaaaaatc 840
cctagttgcg catgtcatat agtttagccat actagtatat agtagtatgt tggtaataaa 900
```

<210> 15
 <211> 490

<212> DNA
 <213> Oryza sativa

<220>
 <221> variation
 <222> (223)
 <223> /cultivar="ksh, hts, mth, yki, krr, tgr, ghm, mnk,
 yma, hez, tkh, akk, ash, ank, mtb, hnh, ymt, hit,
 mmm, fom, don, knh, or ssk"
 /note=" "g" replaced with "a" "

<400> 15
 ccttgtggtc acacttgccg cggttgccgag ggccggcccg ccagaagaaa ccaggccggg 60
 cttggcccg cgcgggtcag catcctcacc gacgactcac ctgcacttct acttccacga 120
 caaggtgagc aagccatcac cgacggcagc gcgggtggtg gaccgggtgg acccgatc 180
 gcggtccttc tttgggatga tcaacgtcat ggacgatccg ctgacggagg ggcccagacc 240
 cgagccaag cccatgggcc gggcccagg gctgtacatg ggctcagacc aggccaaagt 300
 gggcttcctc caggcaatga acctgggtgt caccgacggc acctacaacg gcagcggtgg 360
 caccgtgctc ggccgcaact gccccttcga cgacgtccgg gagatgccgg tgatcgccgg 420
 caccggcgcc ttccgcttcg ccccgggcta cgcccaggcc aggacgcaca ccctggacct 480
 caagaccgga 490

<210> 16
 <211> 460
 <212> DNA
 <213> Oryza sativa

<220>
 <221> variation
 <222> (55)
 <223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
 don, or knh"
 /note=" "t" replaced with "g" "

<220>
 <221> variation
 <222> (59)
 <223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
 don, or knh"
 /note=" "g" replaced with "a" "

<220>
 <221> variation
 <222> (133)..(134)
 <223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
 don, or knh"
 /note=" "tc" replaced with "ttc" "

<220>
 <221> variation
 <222> (162)..(163)
 <223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
 don, or knh"
 /note=" "tc" replaced with "tgtc" "

<220>
 <221> variation

<222> (247)
 <223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
 don, or knh"
 /note=" "g" replaced with "a" "

<220>
 <221> variation
 <222> (319)
 <223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
 don, or knh"
 /note=" "g" replaced with "c" "

<400> 16
 tggcatcttt gcatgttgag ctttaagatg tagtgggctt taactttata gaaatatagg 60
 attaatcct atagaatgtc atgatgcagg atgtcattaa taatcctcca agctgttccc 120
 ttttaacttt tttccctgtt acttgaaact tgactaagga ttctcttcgt attaatgtgg 180
 attgtgtcac tgaccatatg gttgtatctt tctttcagcg cttcgctggg acttggaatg 240
 tttgttgttt ttcagtgtt tcatggccat ggaactcaga atgtctccaa cgtgcaaatt 300
 cttggttgtg atctagaaga tggttatttg tttgaaacaa tggaagcact tgatgttccc 360
 ttagcatata cacttgtgag cttgtgttga tagaattgta aagcttacat atgttttagt 420
 tctactatta ttttgaagag ggaaatgtgc agctggatgc 460

<210> 17
 <211> 314
 <212> DNA
 <213> Oryza sativa

<220>
 <221> variation
 <222> (163)
 <223> /cultivar="ksh, tgr, mnk, yma, hez, akk, hnh, ymt,
 hit, mmm, fom, don, or knh"
 /note=" "g" replaced with "a" "

<400> 17
 ttgaatcggt tgcaggagag ggcgggtggcg atggcggagt tggttggggc gcgggtgtac 60
 agctgctgct gctgccattg ccggaaccac gtctgcactc cagcagaca tcatctccaa 120
 ggcctttcag gtgaagaaga acttgagttc ttggggattt gtggggctga ttgctcaagt 180
 gacaaatact aatcttaggt catgtactga caatctagat tgaattggat ttaatcacta 240
 ggcttctgat gtgcgtagtg ccggattgat ttggtatatt atgctaaaga aggtaaaaac 300
 atggcatagc cgca 314

<210> 18
 <211> 644
 <212> DNA
 <213> Oryza sativa

<220>
 <221> variation
 <222> (421)
 <223> /cultivar="ksh, krr, tgr, mnk, yma, hez, tkh, akk,
 ash, ank, mtb, hnh, hit, mmm, fom, or ssk"
 /note=" "a" replaced with "c" "

<400> 18
 cgaccccatg aagcttttgc ctctctcacg cttcttgcca cagccaaagt atgatgctag 60

```

cctaatttat agcttactgt ttccggtggt aaatttgctt gtagattcgg gttcacgtgc 120
aaacttgaat tgataacacc atgtcatgcc aactgctatc tttctcccaa caagtatttc 180
taaaactcaa ttgaacattg ataattctca agaaagctaa taagtgttac aaatactagc 240
agctctaaga aatatattca aattctaata tatgcctatt aagcccaaag attccactat 300
tgtagtctgc attgtttgga attaattgat gaatctactg caggttctga ctacagaaat 360
agtgcagctt ctctgtccta tatgactata cgaaatgtta caagcaaagc atgaggaatg 420
aatataaaaa actaaacaaa tagtgaaata tctatctaata taacaccaag gagttgcgta 480
actctgtttg ccttctctgc aggggccaaa gtcaaggagg gggcagagg ggtggccgtg 540
gtggtggaag aggcgggttc cgtggccgtg gtggtggtgg cttccgtgga agaggtgcgc 600
caaggggccg tgggtggacct cctaggggtg gaggtcgtgg attt 644

```

```

<210> 19
<211> 549
<212> DNA
<213> Oryza sativa

```

```

<220>
<221> misc_feature
<222> (3)
<223> n= a, t, g, or c

```

```

<220>
<221> variation
<222> (172)
<223> /cultivar="hts, mth, yki, krr, tgr, ghm, mnk, yma,
ksh, akk, ank, mtb, hnh, ymt, hit, mmm, don, knh,
or ssk"
/note=" "t" replaced with "g" "

```

```

<220>
<221> variation
<222> (178)
<223> /cultivar="hts, mth, yki, krr, tgr, ghm, mnk, yma,
ksh, akk, ank, mtb, hnh, ymt, hit, mmm, don, knh,
or ssk"
/note=" "g" deleted"

```

```

<220>
<221> variation
<222> (285)..(286)
<223> /cultivar="hts, mth, yki, krr, tgr, ghm, mnk, yma,
ksh, akk, ank, mtb, hnh, ymt, hit, mmm, don, knh,
or ssk"
/note=" "ct" replaced with "c" "

```

```

<220>
<221> variation
<222> (298)
<223> /cultivar="hts, mth, yki, krr, tgr, ghm, mnk, yma,
ksh, akk, ank, mtb, hnh, ymt, hit, mmm, don, knh,
or ssk"
/note=" "t" replaced with "c" "

```

```

<400> 19
atntccccct atcggatcgg tcatggagat gctactgcc aaccgatga actcctctcc 60
cagtcgcggc gaatcaagcg accccgatga aaaatcgagc tccccggcga cggatcgacc 120
tgccacgatg gcggattgag cggctcacct ctctcaccg gatccagcca gtgtcgtggc 180

```

```

catcttcgag ctcgagctgc atgcctccgt gcgacagcgg cgggtggatcg gacaaggggtg 240
acgcggatct gtcggcctcc accccagatg agcgattttc cactctaccg gattgagtgt 300
atatattggct ttgtctttta tctgactgga tttctcttct ttttcttctt aattaggatt 360
caattgttct taccataaag atgttttttag gcccgatttg gttagggtttt gggggaattt 420
gggttaaact ctatcggttt tctataggag agacggggat agattcggtc ggtttcttta 480
ggagggacgg acagaggaag tgcggagggc ggaggggatc gtgaacaaag gggacgctcc 540
acaaaaata                                     549

```

```

<210> 20
<211> 900
<212> DNA
<213> Oryza sativa

```

```

<220>
<221> variation
<222> (141)
<223> /cultivar="yki, krr, or ghm"
      /note=" "a" replaced with "g" "

```

```

<400> 20
gctagcttgg ccagcagtac gtgagtctga cgatgcatgc atggatgacc ctgctaatta 60
attatacttc ctccatactc atagaaaaaag tccttttagaa caatatttta atcaaacatt 120
taaaatataa atcatgaata actctttaa atgttgagttt aaaaatgtaa aaattatatg 180
aatagatttg tcttgaaaaa tactttcata aaagtgcaca tatattactt ttcaataaat 240
atttttatag aaaaaagaag tcaaaattgt gttttgtaaa ccgtgtcgct gtccaaaacg 300
acttccttta cgagtatcaa ccaatcgaat tgccctccct ctcaaaaagtc aacctcctcc 360
aaattaaagg catgcaagac gccaaaggcg gcagatctgt attcttcccg tggacgggtg 420
gcgcatgcat gcgtacaaac tttttttttt gttggatttg gtacgagcgt agctgataaa 480
gatagctagc tcacagctt ccttcacaga atcacaagaa ctagtggcat atgaatccta 540
catacttcta tccaattcga tcgatcattc accttgtgcc tatgcaatag gcaatatctg 600
agctagcgaa cacagtaact ctccctccc cctcctcac gcgccgatca taaattaata 660
ctccctccgt aatgtatgac gccgttaact ttttaagatg cgtttgatcg ttcattctat 720
ataaaaaaat atataatttt tattatttat ttaaagtatg atttaactat tatatttgta 780
tttgacaaa aatttgaata agataaatag tcaaacatcg atcaaaaagt caacggcatc 840
atacatataa aaataaagggt agtattcaat attttgtaaa atattgatcg gacttgtaaa 900

```

```

<210> 21
<211> 960
<212> DNA
<213> Oryza sativa

```

```

<220>
<221> variation
<222> (480)
<223> /cultivar="mth, ghm, hez, or don"
      /note=" "t" replaced with "c" "

```

```

<400> 21
aacagtcctt gtatgcactg aacgtactgg tgcggcttgc ttgggcaatc gtcaacggtc 60
aagacgtact aaagagtgga ttaacaaaat gaatgtttta ctaactgtat agtgaacaca 120
agcgggcacc tatagtcgta acgaccgccg ccaattgccc cagttgcgta cgcgagaatc 180
gatcgcgca gccgatccga tcagctagaa tattcgaacg gaataaagag aacatctcca 240
tgtcctgata cgtgtgtaca cacacgtacg tacgtgtata cgtatacgcg cgtgtgtatg 300
tgtacatatg tatatatata tatatatata catatacata tgtatgtatg tatatatata 360
tatacatatg tatgtatgta tgtatatata tatacatatg tatgtatgta tgtatatata 420
tatatacata tgtatgtgac ggagctcgtg gtcctcacc gggagaccgc gcaggcccct 480

```

```

ctttgccggt tcggccgggg gcttaggggtg agatctcaag ctctctctct ctgtgtgtgg 540
aaagatcgtc tgctagcaag aaacgcgaga caccggcgat gtatacaggt tcgggccgct 600
gagaagcgta ataccctact cctgtgtttt ggtggatctg tgtatgaatg agctacaaag 660
tgtgagccca cctctcccc gttctaagct ctgaatctgg caagaatcaa ccaaccctt 720
ctctatgggc aaggtcctcc ttttatactt caaggggata ccacatgcac cttcccttt 780
ccaaactgga cttttcttct ctttatgaac ggagattggg atggttgccg tccgaatgac 840
acttcgatgg gacagcccac acctacctcc actcccggcg gagacgggcg caacgtggga 900
tcgtggctgc ccgttgctga cgcgaccagt gtcagaccgg tcattcttgt ccaccacgcg 960

```

```

<210> 22
<211> 900
<212> DNA
<213> Oryza sativa

```

```

<220>
<221> variation
<222> (175)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "g" replaced with "a" "

```

```

<220>
<221> variation
<222> (197)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "g" replaced with "a" "

```

```

<220>
<221> variation
<222> (231)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "g" replaced with "a" "

```

```

<220>
<221> variation
<222> (272)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "t" deleted"

```

```

<220>
<221> variation
<222> (285)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "g" replaced with "t" "

```

```

<220>
<221> variation
<222> (346)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "g" replaced with "a" "

```

<220>
<221> variation
<222> (381)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "c" replaced with "t" "

<220>
<221> variation
<222> (384)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "c" replaced with "t" "

<220>
<221> variation
<222> (481)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "t" replaced with "c" "

<220>
<221> variation
<222> (500)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "c" replaced with "t" "

<220>
<221> variation
<222> (585)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "g" replaced with "c" "

<220>
<221> variation
<222> (613)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "g" replaced with "c" "

<220>
<221> variation
<222> (676)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "c" replaced with "t" "

<220>
<221> variation
<222> (688)..(689)
<223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
hit, mmm, fom, don, or knh"
/note=" "tg" replaced with "tgg" "

<220>
<221> variation

<222> (722)
 <223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
 hit, mmm, fom, don, or knh"
 /note=" "a" replaced with "g" "

<220>
 <221> variation
 <222> (749)
 <223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
 hit, mmm, fom, don, or knh"
 /note=" "a" replaced with "g" "

<220>
 <221> variation
 <222> (754)
 <223> /cultivar="krr, tgr, ghm, mnk, yma, ksh, akk, ymt,
 hit, mmm, fom, don, or knh"
 /note=" "t" replaced with "c" "

<400> 22
 gatgacttct actccctccg tcccctaata taagggattt tgacattttg ctttccttgt 60
 ttgaccactc gttttatatt ttttgtaaat ataaaaaata aaaagttgtg ctttaaagtac 120
 tctggataat aaagtaagtc acaaataaaa taaataataa tttcaaaatt ttctgaataa 180
 gacgaatggt caaacagtgc aagtaaaatg tcaaaatccc ttatattaag ggacggagggg 240
 agtatgtatt acctccaaaa tatagtaact ttaagacgag attagatacc acgaaaatat 300
 attcttaact ctatgtatta ggttggtata tttttttaac agagagtagt atcaattcaa 360
 agtggattaa ttactctttc cgtcttaaaag tataataact tctaagattc aaaatttatc 420
 cccaaacaaa caacttttca cctacatttc attctcaatc gactacaatc ttccactcca 480
 tatattttat tttctctacc aatcacattc tttttcattt aacttcacac tctctcttaa 540
 aacttttata ttttgatacg gaggtagtagt aaaaatttctg atcggttgat gtgcagtggc 600
 aaaagagctc atgagacatt ccactgcaca gacaatctgg gccttcttac atggactggc 660
 acaatttaac atattccaag ctgtgcctgg tggatgtagg gatgcaagta ggtcaaccgc 720
 taaatccact tatatgcaaa ataagtagat atttacgggt ttaccttact aatttggttt 780
 ataaatgggt ttatgggtcg acccatttgc atctctaggt gcgataagtc aagccacgac 840
 atgaaaatgg gttaccactt atttgacgta taagtagatt ggcgggtccg ttttaattgca 900

<210> 23
 <211> 960
 <212> DNA
 <213> Oryza sativa

<220>
 <221> variation
 <222> (131)
 <223> /cultivar="mth, tgr, mnk, tkh, ash, mtb, hnh, hit,
 mmm, don, or ssk"
 /note=" "g" replaced with "c" "

<400> 23
 aatctgatat ttcttctggt tcaaatgata attgacacaa gtgtgccatt ttgcaaaaac 60
 cataccttta atttcatttt atggtacgta tgccaagtaa aacttgtgaa ctacactatt 120
 tagttgctta gtcataaaga actcaagtat tctttttttg aggaaaagcc ttagaagagg 180
 acagggagag cctgttttca ttaaagaaga agagacttgg ccagttttt gaggggaaac 240
 caggcccaaa aacctcagaa ctcaagtatt ctatttatatg aaacttaata aactgcgtca 300
 aagctgtggt cttcttttct gttgttgac atcgcaagtt taagcctgaa atatgttatt 360
 tttccatggt gcccatctt caataatgga agctttatta aaactcagtc aaatacaaca 420

```

agatgataca ttctaattga gcccactccc gacctctgca agaaatgcac acagccacaa 480
aacatgacct atctagaccc ccattgcctt cttcatgctc ttaatttctg taacatactg 540
ttcacctgtc tggctatctg ggatttttca aggtgtacac ctacgggcat tttgatggaa 600
gggtgaagggg aattacctca actgaacaga ggatgctggt tatacagaac tactaacatc 660
gtaagaacat tctatgattc tgatgcagac atacagtaca gttttaatct aatcaaggag 720
gacgccatat gtgggacacc gcagcgaagt gtaaggagtc ctagaacatc taccttagga 780
gttaagaaga atctatgaga ttgtatgtat aaacatcagg tttctgcaaa tactcttadc 840
taaattccta atgcctgtat tgcaaataca tactttcagt tcgcattaaa gtgtgatagt 900
atgtatgtca cctttgttct caggtagctt ggcaaaatgg caggtcagac ggatcaaggct 960

```

<210> 24

<211> 723

<212> DNA

<213> Oryza sativa

<220>

<221> variation

<222> (236)

<223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
don, or knh"
/note=" "a" replaced with "g" "

<220>

<221> variation

<222> (244)

<223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
don, or knh"
/note=" "t" replaced with "g" "

<220>

<221> variation

<222> (318)

<223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
don, or knh"
/note=" "t" replaced with "g" "

<220>

<221> variation

<222> (322)

<223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
don, or knh"
/note=" "g" replaced with "a" "

<220>

<221> variation

<222> (396)..(397)

<223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
don, or knh"
/note=" "tc" replaced with "ttc" "

<220>

<221> variation

<222> (425)..(426)

<223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
don, or knh"
/note=" "tc" replaced with "tgct" "

```

<220>
<221> variation
<222> (510)
<223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
don, or knh"
      /note=" "g" repalaced with "a" "

```

```

<220>
<221> variation
<222> (582)
<223> /cultivar="krr, ghm, ksh, tkh, ymt, hit, mmm, fom,
don, or knh"
      /note=" "g" replaced with "c" "

```

```

<400> 24
gagatatatt gcaatatttt gagaattatg tgaaatgatg atttaacgtg cttggatttt 60
tgtaagctct aaaatttttaa gtgaggataa actatataag catataggat attataaaaa 120
gtgaaggaga ggtatattga aatattatgt ggattatgtg ggatgataat ttaattaaca 180
tgcttgcat ttaaagtctt aaaacttaat aaattagcat gcttgcatga gatttaagat 240
gtattaaaatg ttagtggatg atgtggcatc tttgcatgtt gagctttaag atgtagtggg 300
ctttaacttt atagaaatat aggattaatt cctatagaat gtcatgatgc aggatgtcat 360
taataatcct ccaagctgtt cccttttaac ttttttccct gttacttgaa acttgactaa 420
ggattctctt cgtattaatg tggatttgtt cactgaccat atggttgtat ctttctttca 480
gcgcttcgct gggacttgga atgtttgttg tttttcagtg ctttcatggc catggaactc 540
agaatgtctc caacgtgcaa attcttggtt gtgatctaga agatggttat ttgtttgaaa 600
caatggaagc acttgatgtt cccttagcat atacacttgt gagcttggtt tgatagaatt 660
gtaaagctta catatgtttt agttctacta ttattttgaa gagggaaatg tgcagctgga 720
tgc                                                                    723

```

```

<210> 25
<211> 799
<212> DNA
<213> Oryza sativa

```

```

<220>
<221> variation
<222> (134)
<223> /cultivar="krr"
      /note=" "c" replaced with "t" "

```

```

<220>
<221> variation
<222> (153)..(154)
<223> /cultivar="krr"
      /note=" "gg" replaced with "at" "

```

```

<220>
<221> variation
<222> (181)
<223> /cultivar="krr"
      /note=" "t" replaced with "c" "

```

```

<220>
<221> variation
<222> (197)
<223> /cultivar="krr"
      /note=" "a" replaced with "g" "

```

```

<220>
<221> variation
<222> (216)
<223> /cultivar="krr"
      /note=" "c" replaced with "t" "

<220>
<221> variation
<222> (248)
<223> /cultivar="krr"
      /note=" "c" replaced with "t" "

<220>
<221> variation
<222> (269)
<223> /cultivar="krr"
      /note=" "g" replaced with "a" "

<220>
<221> variation
<222> (271)
<223> /cultivar="krr"
      /note=" "a" replaced with "g" "

<220>
<221> variation
<222> (310)..(311)
<223> /cultivar="krr"
      /note=" "gc" replaced with "at" "

<220>
<221> variation
<222> (322)..(323)
<223> /cultivar="krr"
      /note=" "cc" replaced with "ctctcc" "

<220>
<221> variation
<222> (402)
<223> /cultivar="krr"
      /note=" "a" replaced with "c" "

<220>
<221> variation
<222> (445)..(446)
<223> /cultivar="krr"
      /note=" "gt" replaced with "ggt" "

<220>
<221> variation
<222> (559)
<223> /cultivar="krr"
      /note=" "a" replaced with "c" "

<400> 25
aaattcggaa tggctagctg ttgagagtca ttaactccat ccatgtgatg ggtaacacct 60
actctactct acagtataat actagtgtgg tactgatacg gtgattatat gctgtactat 120
cattatacta ctgcggccct gtttggttct atggactaat gtttagctct cacatttta 180

```

```

ttttaaatta gccctcaaga atccaaacag gtgggctaata tttgagctaa tgtgaattag 240
ccccctcaa aatattagcc cctccaaggg atgctaataag ggtaatttt gtgtggggat 300
catcaaaaag cagctctctc tcctctcttt ctactctctc caacttttag ccttgaatta 360
gcccatggat ccaaataac caccctaggc taatgttttag catattaatt tatgactaaa 420
cattagctct taaaattagc cctgggtaata cttaccaaca gagcctcggt gtgttacttg 480
tgcacgcgat gcacggacag tttcattctc tgtcttcaaa ggcttgaagc cggcaacata 540
tcgttttcat agacagctat tgtaccacaa cggtagtacc ctacttctcc atttctcact 600
cagcttcgtc tttaacaaca ccgttggtacc atgcttacca ttgcctctc tatgaaaata 660
aaaacatcat ttcgattttc aaaaatatag ctcaactggg ttcaactcaa ctgtctaatt 720
aggcgatgta catatcaaca tcggaacgct tataataact tcttaaactc caaaatatat 780
tggttgaatc atcggaggt

```

<210> 26

<211> 709

<212> DNA

<213> Oryza sativa

<220>

<221> variation

<222> (92)

```

<223> /cultivar="mth, krr, ghm, yma, hez, ksh, tkh, akk,
ank, mtb, ymt, hit, mmm, fom, don, knh, or ssk"
/note=" "g" replaced with "c" "

```

<400> 26

```

attttcagaa cagtcacat agacatgcc atttactaca agcgaagact ggagagggtta 60
ggattcaaat agttaataat taactttttt tggaatcagt atgctatata tagttaaaact 120
ttaggagaaa gaacattggt gatatgaaga cactattgct ctaaaatatga acaacacaca 180
caataaatct aagttcggtg tactgaacta tcagggtatgg acctatatc aaaactaaca 240
taggaggcca gcacgtggtc atatcccttg atcccagggt gaaccagttc atatttcaac 300
aagaggggaa gttgttccaa tcctgggttc cagaaaccac actaaacatc tttggaaaga 360
agacactcac cagctataat agaactgctc acaagttgat ccggagcttc gtatgcaagc 420
tctatggccc tgaaaacgtg aaaaaatcac tcctgccaga actagagaac tccatgaggg 480
aaagcttggc gtcattggata ggaaaaccta gtgtcgaggt gaatgatggc gtgtcaaatg 540
taagttaaca tctgcatttc tacataagta ttcacaattg cacagtgtc ataaaaatcat 600
catgatgttt tactatgatt aatttctatt gtgcagatga tcttcggcct agctgccaaa 660
cattgattgg cctcgacatc accattcagg agattgaaaa agacttcag
709

```

<210> 27

<211> 900

<212> DNA

<213> Oryza sativa

<220>

<221> variation

<222> (743)

<223> /cultivar="krr"

/note=" "a" replaced with "g" "

<400> 27

```

cacacatcaa gcacgatcgg aaacgttgta ctgtatctcc cgcataatga ttatggagtt 60
ggcactcgag atcaagatat cagaatagta tatttttctg ttttcaattc ttctctctca 120
cagagctctt cttagcctcg gcttgtgaga gtaagcgcg ctcccagcca actaagaatt 180
tgtcggcctt cgcaatgggt gggtgcaggt ctgctgttct caacttttgg attgacaaa 240
gaagacctaa ttaggacatt agcagggatt cctgtttgca ttgcagagtg tgaatcagct 300
gagactcttc ctccgctccc acatagatgc atatcattgt gctcttacta aagttgattt 360

```

```

gcagacttgt tgcctagaa aactcgtcta ggcaatgctt tagtggtggt acataagcaa 420
tcgaagctcg tcaaataatc aatataacat tggcatactg cagagctgta cgaggctctct 480
gagggtacag atggtgtcca gagcagggtt tgctctaaga aggcatgga gcacatctgc 540
cggatgaaca agtaagggtga cataggatca ccttgacgta gccctctctt acaaccgatc 600
cacctgcccc ggacttcatt gagaaggata gttgactttg aagtctgcta catgttgatc 660
acccaatgga tccaagtatc gggaatcctc ttgccctcat aatatctagc agactttccc 720
atcttatggg ttaggaggaa ttatatggtg tttgacaaat ttctaattaa atcttattgg 780
catatatatt tcagggaat atattggtt tggttctaag cacaactaca aatgtgtgaa 840
aagtacaaga agctaaaaca tactgcatat caaaacttgg agtccacggc cataaatata 900

```

```

<210> 28
<211> 840
<212> DNA
<213> Oryza sativa

```

```

<220>
<221> variation
<222> (164)
<223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
      hnh, hit, mmm, fom, or ssk"
      /note=" "t" replaced with "c" "

```

```

<220>
<221> variation
<222> (225)
<223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
      hnh, hit, mmm, fom, or ssk"
      /note=" "a" replaced with "g" "

```

```

<220>
<221> variation
<222> (254)
<223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
      hnh, hit, mmm, fom, or ssk"
      /note=" "g" replaced with "a" "

```

```

<220>
<221> variation
<222> (261)
<223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
      hnh, hit, mmm, fom, or ssk"
      /note=" "a" replaced with "g" "

```

```

<220>
<221> variation
<222> (268)
<223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
      hnh, hit, mmm, fom, or ssk"
      /note=" "a" replaced with "g" "

```

```

<220>
<221> variation
<222> (296)
<223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
      hnh, hit, mmm, fom, or ssk"
      /note=" " t" replaced with "c" "

```

<220>
 <221> variation
 <222> (326)
 <223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
 hnh, hit, mmm, fom, or ssk"
 /note=" "a" replaced with "g" "

<220>
 <221> variation
 <222> (552)
 <223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
 hnh, hit, mmm, fom, or ssk"
 /note=" "c" replaced with "t" "

<220>
 <221> variation
 <222> (667)
 <223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
 hnh, hit, mmm, fom, or ssk"
 /note=" "c" replaced with "t" "

<220>
 <221> variation
 <222> (728)
 <223> /cultivar="mth, krr, tgr, mnk, yma, hez, ksh, akk,
 hnh, hit, mmm, fom, or ssk"
 /note=" "g" replaced with "a" "

<400> 28
 ttgaataaac catggaaaat tattacacat ataatacatt agcgaccaa ttgtttcgcc 60
 cctaactaga tgatgccccg cgctttgctg cgggatatat gttagatact ggagaaatga 120
 acaaatgatt tggattaaaa tattatgaaa atggtttgag aattagtatg tttagttttg 180
 gaatgaagta aattgtagat ataattacta tatgcttgca tgttaaactt tgtgtgctta 240
 atgggttgat gtggcatgct acatgtaagt tttaggagt ctaataaata ctatgtttat 300
 atgttgagct ttaggtgttt agtggacatt agctttatag aaagaagaga tccctttcct 360
 ttttcagggtg attttctgtc cagtccacct cttttcatct ttttttggtg taataactct 420
 cgtggacgag aatttagagt atttaccatc caattcgtgt gcctcaactt ttttacctc 480
 aatccgtatg cctctataa tactccgtat gacattagga ctgctaacta gtctatttgg 540
 taccactttc tcagtttttg atgtatttct catttcttaa ctcaatttgt atttctttta 600
 tggcattgtg gacaattttg cccctaggcc cactgtaaga tcaaaggaag attgtcgtag 660
 gctctccgga ccttccatta tatttgagag ataaagtga taattcaagt catcaaaca 720
 gcataatgaa acatccgacg cctcgagaga gaaatattgg agacattgct ggacctttag 780
 cctgccagtc aacttcagcc taaaatgtgc tcgtcaaacc actcgaaggc ggcgaccaga 840

<210> 29
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:an artificially
 synthesized primer sequence

<400> 29
 gcaattgccca ctggaagaat

<210> 30
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 30
taagttgggg aatgcgatgt 20

<210> 31
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 31
tctgctgcct ctgcacatac 20

<210> 32
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 32
aaaaacgaca ccacatcagc a 21

<210> 33
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 33
ggggcgctcc ttcaaaactt 20

<210> 34
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 34
ggtttggcac accacaatgg 20

<210> 35
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 35
tgcaatgtgc cattccatag 20

<210> 36
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 36
tatgacaagg tgggccctaa 20

<210> 37
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 37
cgccacagaa cggacaaaag 20

<210> 38
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 38
gaccaatcct ttgccgaagc 20

<210> 39
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 39
ccgatggcag cacaaatctt

20

<210> 40
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 40
tcagtttggc ttgggtgtcc

20

<210> 41
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 41
ccattggttg gtgtggctgt

20

<210> 42
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 42
tggtcgcggc tgataagcta

20

<210> 43
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 43
tgcgatggag ggagtattgg 20

<210> 44
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 44
tgcgagcgta caccgctagt 20

<210> 45
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 45
gcttgaggca cgtcaaaatg 20

<210> 46
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 46
ttccgtcgtt catgttggtc 20

<210> 47
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 47
cccacggaaa cagccaaaag 20

<210> 48
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 48
tgctgccatg caaagaatcg

20

<210> 49
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 49
attcgaacgg gggatccagt

20

<210> 50
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 50
agcggatcct gctgatgagg

20

<210> 51
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 51
gtgctgcaaa ggggagtatg

20

<210> 52
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 52
cgccaacctc gtaaataaaa 20

<210> 53
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 53
gaacctgagg accaagtgaag agagt 25

<210> 54
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 54
ctagagagga gagggagaag gagga 25

<210> 55
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 55
ataccacagg tgctgcgtga 20

<210> 56
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<400> 56
tgcgcaacta gggattttcc 20

<210> 57
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synthesized primer sequence

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ccttgtaggtc acacttgagg 20

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synthesized primer sequence

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<210> 59
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gcggctatgc catgttttta cc 22

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<210> 64
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synthesized primer sequence

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synthesized primer sequence

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synthesized primer sequence

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<210> 72
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<210> 73
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tgccaagcta cctgagaaca 20

<210> 75
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<210> 77
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synthesized primer sequence

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20

<210> 78
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synthesized primer sequence

<400> 78
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<210> 79
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caagcgaaga ctggagaggt t

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<210> 80

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<212> DNA

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20

<210> 81

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<400> 81

atcaagcacg atcggaacg

20

<210> 82

<211> 20

<212> DNA

<213> Artificial Sequence

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<400> 82

atggccgtgg actccaagtt

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<210> 83

<211> 21

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<400> 83
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<210> 84
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synthesized primer sequence

<400> 84
gccttcgagt ggtttgacga 20

<210> 85
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synthesized primer sequence

<400> 85
aggtcgacac ttcggccgtt 20

<210> 86
<211> 21
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synthesized primer sequence

<400> 86
gaacagctgt aataagactg a 21

<210> 87
<211> 20
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<220>
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synthesized primer sequence

<400> 87
gatgcctgca aagtcccgac 20

<210> 88
<211> 20

<212> DNA
<213> Artificial Sequence

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synthesized primer sequence

<400> 88

cgcaaaccat caacttaca

20

<210> 89

<211> 22

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 89

cgattggcag ataaagttgg at

22

<210> 90

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 90

tggctagaag tagatgctgc

20

<210> 91

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 91

aaacaggtga gggaaagatg

20

<210> 92

<211> 20

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 92
gactgaaaag ttgtgtgtgt 20

<210> 93
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 93
catgaaatta ttacagaact acaga 25

<210> 94
<211> 20
<212> DNA
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synthesized primer sequence

<400> 94
agcacctccc cctcctctaa 20

<210> 95
<211> 20
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<213> Artificial Sequence

<220>
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synthesized primer sequence

<400> 95
ggaactagcc cgtgacgctc 20

<210> 96
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<212> DNA
<213> Artificial Sequence

<220>
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synthesized primer sequence

<400> 96
gagatcgag atgatccaaa 20

<210> 97
<211> 20

<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 97
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<210> 98
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<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 98
gaagacagct tctgcttggt tgt

23

<210> 99
<211> 20
<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 99
aacgtcatgg acgatccgct

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<210> 100
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 100
gccatgaaag cactgaaaaa

20

<210> 101
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 101
ttgagttctt ggggatttgt 20

<210> 102
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
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synthesized primer sequence.

<400> 102
tgttacaagc aaagcatgag gaatg 25

<210> 103
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 103
agctcgagct cgaagatggc 20

<210> 104
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
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synthesized primer sequence

<400> 104
caaacattta aaatataaat catgaata 28

<210> 105
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially
synthesized primer sequence

<400> 105
taagcccccg gccgaaccgg caaag 25

<210> 106

<211> 20
<212> DNA
<213> Artificial Sequence

<220>
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synthesized primer sequence

<400> 106
gactacaatc ttccactcca

20

<210> 107
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<213> Artificial Sequence

<220>
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synthesized primer sequence

<400> 107
tgtgaactac actatntagt tgctta

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<210> 108
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
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synthesized primer sequence

<400> 108
ctgggacttg gaatgtttgt t

21

<210> 109
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<212> DNA
<213> Artificial Sequence

<220>
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<400> 109
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<210> 110
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<213> Artificial Sequence

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<400> 110
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<210> 111
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<212> DNA
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<400> 111
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<210> 112
<211> 21
<212> DNA
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<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 112
gtctatttgg taccactttc t 21

<210> 113
<211> 20
<212> DNA
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<220>
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<400> 113
accgggtagg gaaacaaaac 20

<210> 114
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:an artificially synthesized primer sequence

<400> 114
aataatactt cggcgcatcg 20